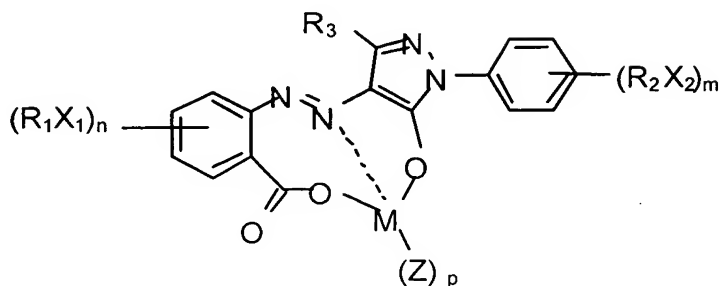


What Is Claimed Is:

1. A printing ink composition comprising a metal-complexed dye represented by the formula



or a salt thereof

wherein:

M is a metal;

R₁ and R₂ each independently is a solubilizing group;

R₃ is selected from the group consisting of:

- (1) alkyl;
- (2) cyano;
- (3) COOH; and
- (4) CONH₂;

X₁ and X₂ each independently is a counterion;

Z is a ligand;

n is an integer of from 1 to 3;

m is an integer of from 1 to 3; and

p is an integer of from 1 to 3;

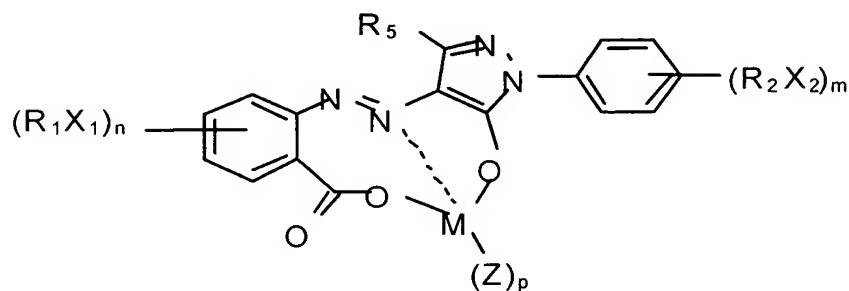
dissolved or dispersed in a liquid carrier.

2. The printing ink composition according to Claim 1 wherein said liquid carrier comprises water.

3. The printing ink composition according to Claim 1 wherein M is copper.

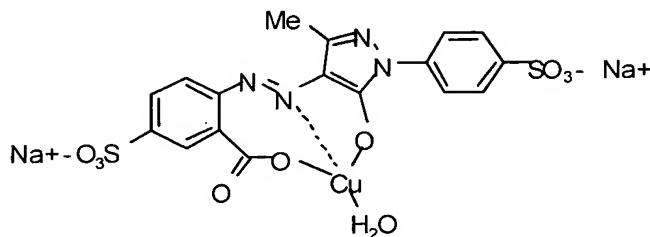
4. The printing ink composition according to Claim 1, wherein at least one of X_1 and X_2 is an alkali metal ion.

5. The printing ink composition according to Claim 1 which includes a dye represented by the formula



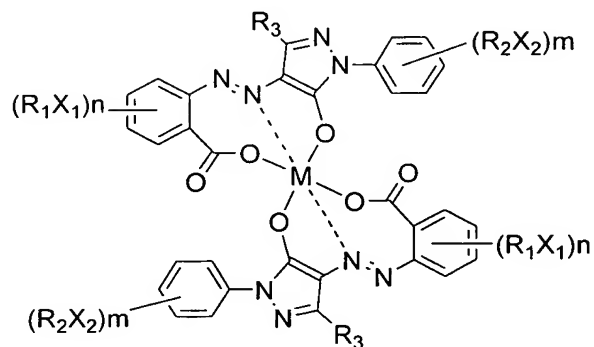
wherein R_5 is alkyl and M, R_1 , R_2 , X_1 , X_2 , Z, m, n and p are as defined in claim 1.

6. The printing ink composition according to Claim 1 which includes a dye represented by the formula



7. An ink jet ink comprising a solution of a dye according to Claim 1 in water, aqueous alcohol or an aqueous glycol.

8. A printing ink composition comprising a metal-complexed dye represented by the formula



5

wherein:

M is a metal;

R₁ and R₂ each independently is a solubilizing group;

R₃ is selected from the group consisting of:

- 10
- (5) alkyl;
 - (6) cyano;
 - (7) COOH; and
 - (8) CONH₂;

X₁ and X₂ each independently is a counterion;

15 n is an integer of from 1 to 3; and

m is an integer of from 1 to 3;

dissolved or dispersed in a liquid carrier.

9. The printing ink composition according to Claim 8 wherein said liquid carrier comprises water.

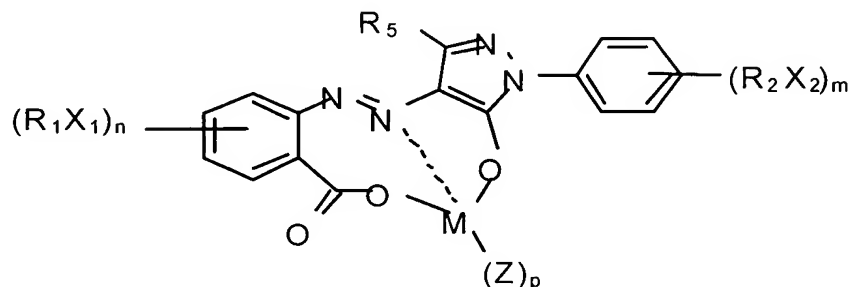
10. The printing ink composition according to Claim 8 wherein M is copper.

11. The printing ink composition according to Claim 8 wherein at least one of X_1 and X_2 is an alkali metal ion.

12. An ink jet cartridge comprising a housing having walls defining a reservoir and an outlet opening, the cartridge containing an ink jet ink according to Claims 1 or 8.

13. An ink jet printing method comprising forming a plurality of drops of an ink composition, and directing said drops onto an ink receptive material to form an image thereon, wherein said ink composition is according to Claims 1 or 8.

14. A metal-complexed dye represented by the formula



where

M is a metal;

R_1 and R_2 each independently is a solubilizing group;

R_5 is alkyl;

15 X_1 and X_2 each independently is a counterion;

Z is a ligand;

n is an integer of from 1 to 3;

m is an integer of from 1 to 3; and

p is an integer of from 1 to 3.

15. A metal-complexed dye according to Claim 14 wherein R_5 is methyl.
16. A metal-complexed dye according to claim 15 wherein M is copper.